carbon atoms or an aromatic hydrocarbon group, and

a phosphate represented by general formula (3):

$$O = \begin{array}{c} OR^{1c} \\ O = OH \\ OH \end{array}$$
 (3)

where R^{1c} represents an aliphatic hydrocarbon group having 1 to 12 carbon atoms or an aromatic hydrocarbon group, and

wherein any of said positive electrode, said non-aqueous electrolyte, and said negative electrode optionally contains a phosphate represented by general formula (1):



where R^{1a}, R^{2a}, and R^{3a} independently represent an aliphatic hydrocarbon group having 7 to 12 carbon atoms.

10. (New) The non-aqueous electrolyte secondary battery in accordance with claim 9, wherein at least one of said positive electrode, said non-aqueous electrolyte, and said negative electrode contains at least one phosphate selected from the group consisting of a phosphate represented by the general formula (1) and a phosphate represented by the general formula (2), wherein at least two selected from the group consisting of R^{1a}, R^{2a}, and R^{3a} in the general formula (1) are identical with each other and/or R^{1b} and R^{2b} in the general formula (2) are identical with each other.

11. (New) The non-aqueous electrolyte secondary battery in accordance with claim 9, wherein at least one of said positive electrode, said non-aqueous electrolyte, and said negative electrode contains a mixture of two or three phosphates selected from the group consisting of a phosphate represented by the general formula (1), a phosphate represented by the general formula (2), and a phosphate represented by the general formula (3), wherein R^{1a}, R^{2a} and R^{3a}, R^{1b}, R^{2b} and R^{1c} in the general formulas (1) to (3) have the same number of carbon atoms, respectively.

12. (New) The non-aqueous electrolyte secondary battery in accordance with claim 11, wherein each phosphate in the mixture comprises not less than 30 volume percent

BEST AVAILABLE CO. /

based on a total volume of the mixture.

13. (New) The non-aqueous electrolyte secondary battery in accordance with claim 9, wherein at least one of said positive electrode, said non-aqueous electrolyte, and said negative electrode contains at least one phosphate selected from the group consisting of dibutyl phosphate, dipentyl phosphate, dihexyl phosphate, diheptyl phosphate, dioctyl phosphate, dinonyl phosphate, didecyl phosphate, diundecyl phosphate, didodecyl phosphate, monobutyl phosphate, monopentyl phosphate, monohexyl phosphate, monohexyl phosphate, monohexyl phosphate, monohexyl phosphate and monododecyl phosphate.

14. (New) The non-aqueous electrolyte secondary battery in accordance with claim 9, wherein said non-aqueous electrolyte contains 0.1 to 20 wt % of said at least one phosphate selected from the group consisting of a phosphate represented by the general formula (2) and a phosphate represented by the general formula (3).

15. (New) The non-aqueous electrolyte secondary battery in accordance with claim 9, wherein said chargeable and dischargeable positive electrode contains at least one selected from the group consisting of LiCoO₂, LiMn₂O₄, LiNiO₂ and LiFeO₂, and said chargeable and dischargeable negative electrode contains at least one selected from the group consisting of a carbon material, a metallic lithium, a lithium alloy, and a compound containing lithium.

16. (New) A method for producing a non-aqueous electrolyte secondary battery comprising the steps of:

preparing an electrode material comprising an active material, a conductive agent and a binder;

applying said electrode material on a current collector plate to prepare an electrode;

assembling a non-aqueous electrolyte secondary battery using said electrode and a non-aqueous electrolyte;

adding to at least one of said active material, said electrode material and said electrode at least one phosphate selected from the group consisting of

a phosphate represented by general formula (2):